

***Status of the Claims***

1. (Previously Presented) A weather and terrestrial vegetation-based system for forecasting renovation and management for a body of water, comprising:

means for accessing a database having stored therein data for analyzing the body of water, wherein said database includes weather history data, weather forecast data, terrestrial vegetation history data, terrestrial vegetation forecast data, body of water history data, a list of observable problems, and a list of fundamental problems; and

a renovation system to execute a request to analyze the body of water for renovation and management by using said weather history data, said weather forecast data, said terrestrial vegetation history data, said terrestrial vegetation forecast data, and said body of water history data to determine potential problems for the body of water and potential solutions for said potential problems;

wherein said list of observable problems includes information about at least one of a fish activity within the body of water, a density of terrestrial vegetation within a vicinity of the body of water, a taste of the body of water, and an odor of the body of water; and

wherein said list of fundamental problems includes information about at least one of a density of nutrients within a soil within said vicinity of the body of water and a distribution of thermal energy within the body of water;

wherein the body of water is one of a lake, a reservoir, and a pond.

2. (Previously Presented) The system of claim 1, wherein said database data are one of passed in via a front end system, collected by said renovation system, and derived by said renovation system.
3. (Previously Presented) The system of claim 1, further comprising a front end system to receive a request to analyze the body of water for renovation and management, wherein said front end system is a web server.
4. (Original) The system of claim 1, wherein said renovation system comprises:  
processing modules for performing processing functions;  
administration modules for performing administration functions; and  
background modules for performing background functions required by said processing modules and said administration modules.
5. (Canceled)
6. (Previously Presented) The system of claim 1, wherein said renovation system comprises:  
an analyzer module to determine an impact said weather history data and said terrestrial vegetation history data had on actual observable problems of the body of water;  
a diagnosis module to determine actual fundamental problems for the body of water based on said actual observable problems; and

a remedy module to estimate an impact said weather forecast data and said terrestrial vegetation forecast data will have on said actual fundamental problems based on the impact said weather history data and said terrestrial vegetation history data had on said actual observable problems, and then to determine, based on the impact said weather forecast data and said terrestrial vegetation forecast data will have on said actual fundamental problems, and at least one solution for said actual fundamental problems.

7. (Previously Presented) The system of claim 6, further comprising:

a compliance module to determine compliance for a solution of said at least one solution; and

a cost module to determine for said solution of said at least one solution a list of factors that will aid in the renovation and management of the body of water;

wherein said list of factors includes at least one of an estimated cost, years to complete, a possible funding, and a timing of implementation.

8. (Previously Presented) A terrestrial vegetation-based system for forecasting renovation and management for a body of water, comprising:

means for accessing a database having stored therein data for analyzing the body of water, wherein said database includes at least one of terrestrial vegetation history data, terrestrial vegetation forecast data, body of water history data, a list of observable problems, a list of fundamental problems, and a list of solutions;

a front end system to receive a request to analyze the body of water for renovation and management; and

a renovation system to execute said request by using at least one of said terrestrial vegetation history data, said terrestrial vegetation forecast data, said body of water history data, said list of problems, and said list of solutions to determine potential problems for the body of water and potential solutions for said potential problems;

wherein said list of observable problems includes information about at least one of a fish activity within the body of water, a density of terrestrial vegetation within a vicinity of the body of water, a taste of the body of water, and an odor of the body of water; and

wherein said list of fundamental problems includes information about at least one of a density of nutrients within a soil within said vicinity of the body of water and a distribution of thermal energy within the body of water;

wherein the body of water is one of a lake, a reservoir, and a pond.

9. (Previously Presented) The system of claim 8, wherein said database data are one of passed in via said front end system, collected by said renovation system, and derived by said renovation system.

10. (Original) The system of claim 8, wherein said front end system is a web server.

11. (Original) The system of claim 8, wherein said renovation system comprises:  
processing modules for performing processing functions;  
administration modules for performing administration functions; and  
background modules for performing background functions required by said processing modules and said administration modules.

12. (Canceled)

13. (Previously Presented) The system of claim 8, wherein said renovation system comprises:

an analyzer module to determine an impact said terrestrial vegetation history data had on actual observable problems of the body of water;

a diagnosis module to determine actual fundamental problems for the body of water based on said actual observable problems; and

a remedy module to estimate an impact said terrestrial vegetation forecast data will have on said actual fundamental problems based on the impact said terrestrial vegetation history data had on said actual observable problems, and then to determine, based on the impact said terrestrial vegetation forecast data will have on said actual fundamental problems, and at least one solution for said actual fundamental problems.

14. (Previously Presented) The system of claim 13, further comprising:

a compliance module to determine compliance for a solution of said at least one solution; and

a cost module, wherein said cost module determines for said solution of said at least one solution a list of factors that will aid in the renovation and management of the body of water;

wherein said list of factors includes at least one of an estimated cost, years to complete, a possible funding, and a timing of implementation.

15. (Previously Presented) A computer-based weather and terrestrial vegetation-based method for forecasting renovation and management for a body of water, comprising the steps of:

accessing a database having stored therein data for analyzing the body of water, wherein said database includes weather history data, weather forecast data, terrestrial vegetation history data, terrestrial vegetation forecast data, body of water history data, a list of observable problems, and a list of fundamental problems, and wherein said database is coupled to a computer system; and

executing on the computer system a request to analyze the body of water for renovation and management by using said weather history data, said weather forecast data, said terrestrial vegetation history data, said terrestrial vegetation forecast data, and said body of water history data to determine potential problems for the body of water and potential solutions for said potential problems;

wherein said list of observable problems includes information about at least one of a fish activity within the body of water, a density of terrestrial vegetation within a vicinity of the body of water, a taste of the body of water, and an odor of the body of water; and

wherein said list of fundamental problems includes information about at least one of a density of nutrients within a soil within said vicinity of the body of water and a distribution of thermal energy within the body of water;

wherein the body of water is one of a lake, a reservoir, and a pond.

16. (Previously Presented) The method of claim 15, wherein said database data are one of passed in via a front end system, collected by a renovation system, and derived by said renovation system.
17. (Original) The method of claim 16, wherein said front end system is a web server.
18. (Original) The method of claim 15, wherein said executing step comprises the steps of:
  - performing processing functions;
  - performing administration functions; and
  - performing background functions required by said performing processing functions step and said performing administration functions step.
19. (Canceled)
20. (Previously Presented) The method of claim 15, wherein said executing step comprises the steps of:
  - determining an impact said weather history data and said terrestrial vegetation history data had on actual observable problems of the body of water;
  - determining actual fundamental problems for the body of water based on said actual observable problems;

estimating an impact said weather forecast data and said terrestrial vegetation forecast data will have on said actual fundamental problems based on the impact said weather history data and said terrestrial vegetation history data had on said actual observable problems; and

determining at least one solution from said potential solutions based on said estimated impact said weather forecast data and said terrestrial vegetation data will have on said actual fundamental problems.

21. (Previously Presented) The method of claim 20, wherein said executing step further comprises the steps of:

determining a compliance for a solution of said at least one solution; and

determining a list of factors for said solution of said at least one solution that will aid in the renovation and management of the body of water;

wherein said list of factors includes at least one of an estimated cost, years to complete, a possible funding, and a timing of implementation.

22. (Previously Presented) A computer-based terrestrial vegetation-based method for forecasting renovation and management for a body of water, comprising the steps of:

accessing a database having stored therein data for analyzing the body of water, wherein said database includes at least one of terrestrial vegetation history data, terrestrial vegetation forecast data, body of water history data, a list of observable problems, a list of fundamental problems, and a list of solutions, and wherein said database is coupled to a computer system;

receiving on the computer system a request to analyze the body of water for renovation and management; and

executing on the computer system said request by using at least one of said terrestrial vegetation history data, said terrestrial vegetation forecast data, said body of water history data, said list of problems, and said list of solutions to determine potential problems for the body of water and potential solutions for said potential problems;

wherein said list of observable problems includes information about at least one of a fish activity within the body of water, a density of terrestrial vegetation within a vicinity of the body of water, a taste of the body of water, and an odor of the body of water; and

wherein said list of fundamental problems includes information about at least one of a density of nutrients within a soil within said vicinity of the body of water and a distribution of thermal energy within the body of water;

wherein the body of water is one of a lake, a reservoir, and a pond.

23. (Previously Presented) The method of claim 22, wherein said database data are one of passed in via a front end system, collected by a renovation system, and derived by said renovation system.

24. (Original) The method of claim 23, wherein said front end system is a web server.

25. (Original) The method of claim 22, wherein said executing step comprises the steps of:

performing processing functions;

performing administration functions; and  
performing background functions required by said performing processing functions  
step and said performing administration functions step.

26. (Canceled)

27. (Previously Presented) The method of claim 22, wherein said executing step  
comprises the steps of:

determining an impact said terrestrial vegetation history data had on actual observable  
problems of the body of water;

determining actual fundamental problems for the body of water based on said actual  
observable problems;

estimating an impact said terrestrial vegetation forecast data will have on said actual  
fundamental problems based on the impact said terrestrial vegetation history data had on said  
actual observable problems; and

determining at least one solution from said potential solutions based on said estimated  
impact said terrestrial vegetation data will have on said actual fundamental problems.

28. (Previously Presented) The method of claim 27, wherein said list of factors includes  
at least one of an estimated cost, years to complete, a possible funding, and a timing of  
implementation.